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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/812,031	03/19/2001	Fumihiro Tawa	0941.65325	9342

24978 7590 04/04/2005

GREER, BURNS & CRAIN
300 S WACKER DR
25TH FLOOR
CHICAGO, IL 60606

EXAMINER

GIESY, ADAM

ART UNIT PAPER NUMBER

2651

DATE MAILED: 04/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/812,031

Applicant(s)

TAWA ET AL.

Examiner

Adam R. Giesy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-14 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figure 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Allowable Subject Matter

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Arikawa et al. (US Pat. No. 6,778,486 B1) discloses an optical module that includes a mounted laser, photodetectors, and a reflective surface that is slanted in respect to the substrate.

b. Nakamura et al. (US Doc. No. 2004/0022141 A1) discloses an optical device in which a laser, photodetectors, and a reflective layer are mounted upon a substrate.

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- c. Shindo (US Doc. No. 2002/0039343 A1) discloses an optical device in which a laser and a reflective layer are mounted on a substrate, wherein the reflective layer is angled with respect to the substrate.
 - d. Nagano (US pat. No. 5,680,385) discloses an optical device that includes a laser, a reflective surface, and a photodetector, where the reflective surface is angled in relation to the substrate.
 - e. Nemoto (US Doc. No. 2002/0015363 A1) discloses an optical device with a laser, photodetectors, and reflective surface mounted upon a substrate, where the reflective surface is slanted.
 - f. Nemoto (US Pat. No. 6,314,063 B1) discloses an optical device with a laser, photodetectors, and reflective surface mounted upon a substrate, where the reflective surface is slanted.
 - g. Matsumoto et al. (US Doc. No. 2003/0231573 A1) discloses an optical device that includes a laser, a reflective surface, and polarization control.
 - h. Uchizaki (US Pat. No. 6,496,469 B1) discloses an integrated optical device that includes a reflector and a laser that is mounted in a microchip (on a substrate).
 - i. Kume et al. (US Pat. No. 5,181,193) discloses an optical device that contains a laser, reflective layer, and a photosensor that are all mounted on a substrate.
4. The following is an examiner's statement of reasons for allowance:
- Claims 1-14 are allowable over prior art of record.
- Regarding independent claims 1 and 8, none of the prior art of record alone or in combination disclose or suggest a light emission unit having an emission layer emitting a light

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beam; a light reflection unit reflecting the light beam, emitted by the light emission unit, to a predetermined direction; and a substrate having photodetecting elements disposed thereon, the photodetecting elements detecting a reflected light beam from a storage medium, wherein the emission layer of the light emission unit is slanted to a central axis of the substrate, **and the light emission unit and the light reflection unit are disposed on the substrate such that one of a change of a distribution of intensity of the reflected light beam from the light reflection unit and a change of a direction of polarization of the reflected light beam, caused by the slanted emission layer, is corrected.**

Claims 2-7 and 9-14 are allowed as being dependent upon the aforementioned independent claims 1 and 8 (respectively).

Conclusion

5. This application is in condition for allowance except for the following formal matters:

Required response to the objected figure 5 as discussed above. Applicant should also amend the title to more clearly indicate the novelty of the invention as discussed in the specification objection above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam R. Giesy whose telephone number is (571) 272-7555. The examiner can normally be reached on 8:00am- 4:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ARG 3/31/2005



W. R. YOUNG
PRIMARY EXAMINER